

# V&V Reference Report

## L2 ASCDS Version : 8.4.5

Observation 5154 - L2 Version 3  
Chandra X-Ray Center

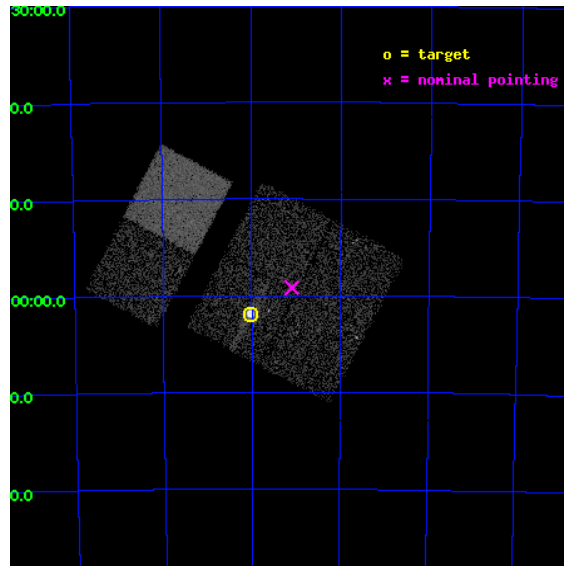
L2 Processing Date : Nov 9 2012

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# 1 Front

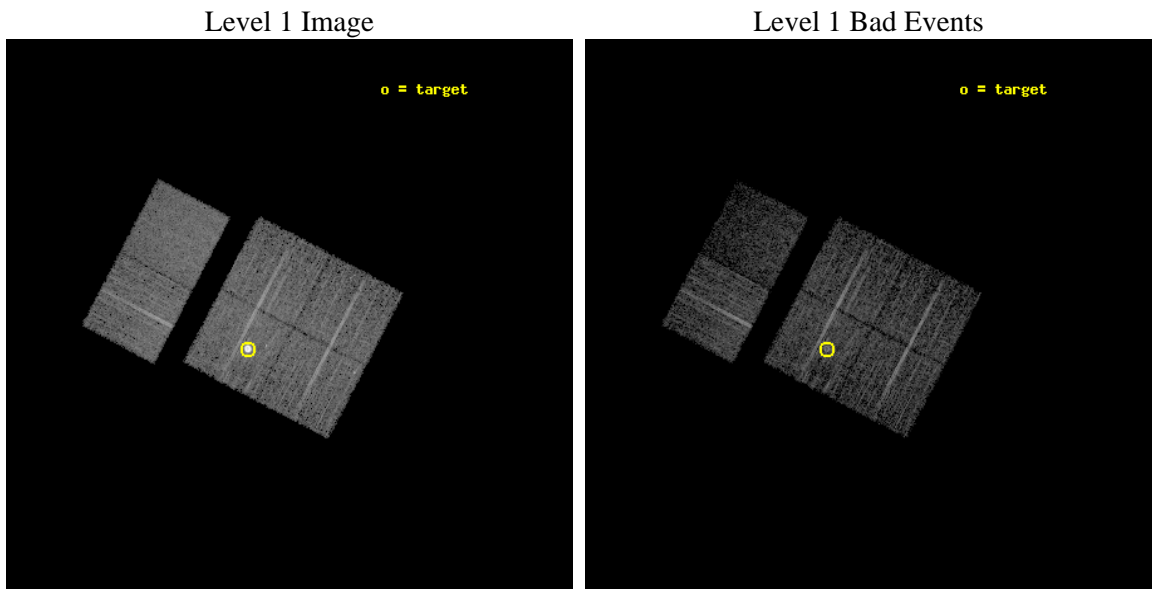
seq_num	590352	Sequence number
obs_id	5154	Observation id
title	AO5A ACIS-I Calibration Observations of E0102-72	Proposal title
observer	Dr. CXC Calibration	Principal investigator
object	E0102-72[I2,-120,4.7,2.5,0]	Source name
dtcycle	0	&#160
cycle	P	events from which exps? Prim/Second/Both
ra_targ	16.01	Observer's specified target RA [deg]
dec_targ	-72.032028	Observer's specified target Dec [deg]
ra_nom	15.774100977193	Nominal RA [deg]
dec_nom	-71.986630762929	Nominal Dec [deg]
roll_nom	297.75934752739	Nominal Roll [deg]
revision	3	Processing version of data
ontime	7545.5999718904	Sum of GTIs [s]
livetime	7450.0530416315	Livetime [s]
ontime0	7545.5999718904	Sum of GTIs [s]
ontime1	7545.5999718904	Sum of GTIs [s]
ontime2	7545.5999718904	Sum of GTIs [s]
ontime3	7542.3589816988	Sum of GTIs [s]
ontime6	7545.5999718904	Sum of GTIs [s]
ontime7	7545.5999718904	Sum of GTIs [s]
l2events	56369	Number of level 2 events



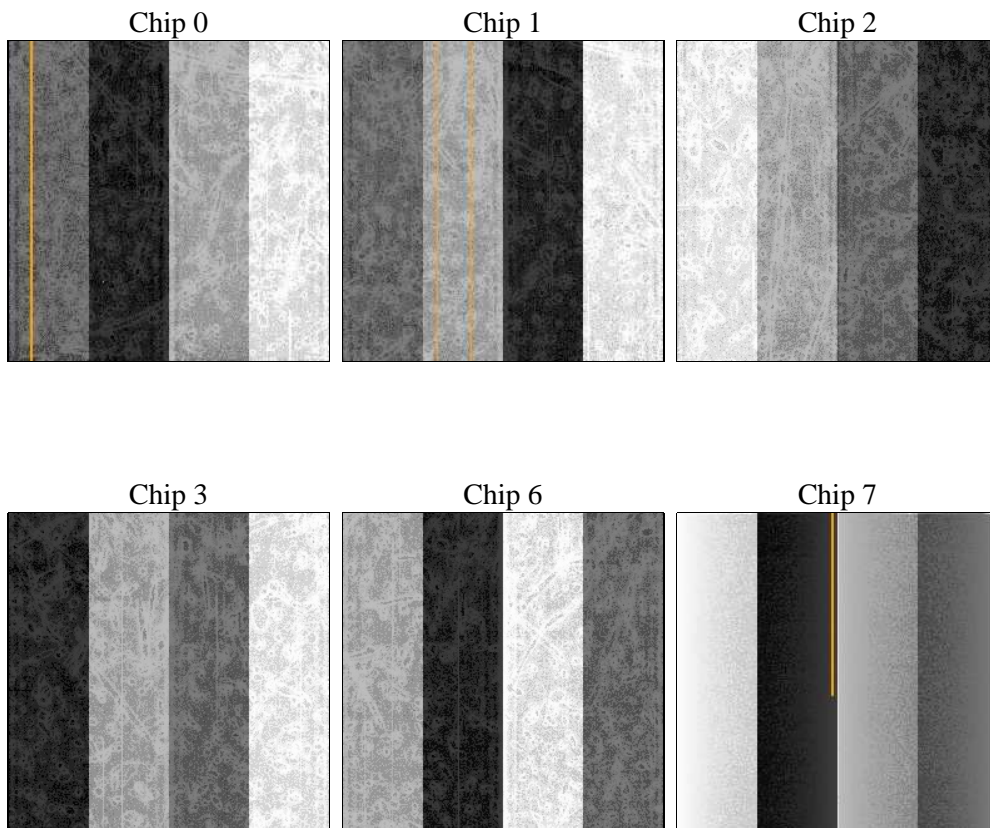
## 2 OBI

### 2.1 OBI

#### 2.1.1 Images



#### 2.1.2 Bias



### 2.1.3 Parameters

obi_num	0	Obi number	sched_exp_time	7791.724000	[s] Scheduled observation exposure time
ascdsver	8.4.5	Processing system revision	ontime	7545.5999718904	Sum of GTIs [s]
caldsver	4.5.2	&#160	ontime0	7545.5999718904	Sum of GTIs [s]
date	2012-11-09T07:41:57	Date and time of file creation	ontime1	7545.5999718904	Sum of GTIs [s]
revision	3	Processing version of data	ontime2	7545.5999718904	Sum of GTIs [s]
			ontime3	7542.3589816988	Sum of GTIs [s]
			ontime6	7545.5999718904	Sum of GTIs [s]
			ontime7	7545.5999718904	Sum of GTIs [s]
			l1events	227088	Number of level 1 events

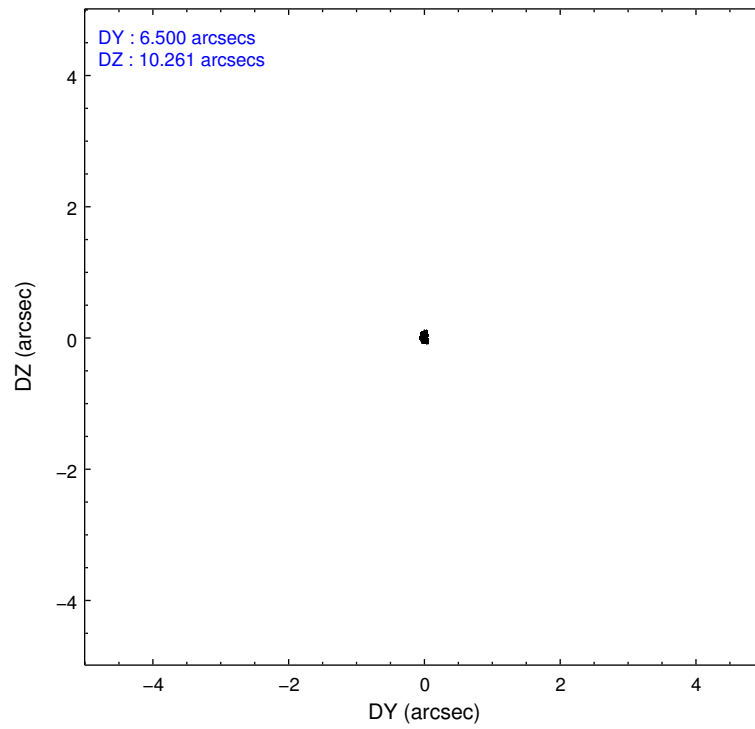
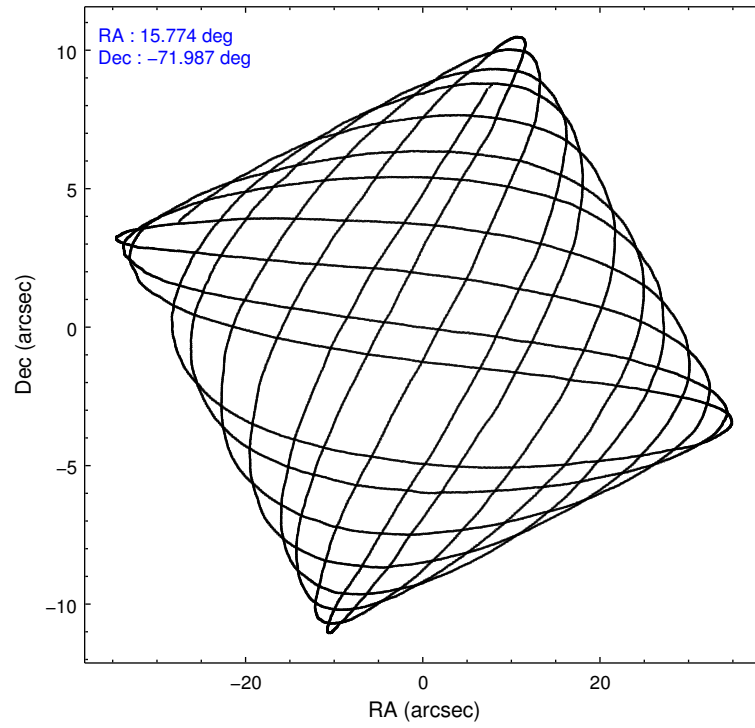
### 2.1.4 Events

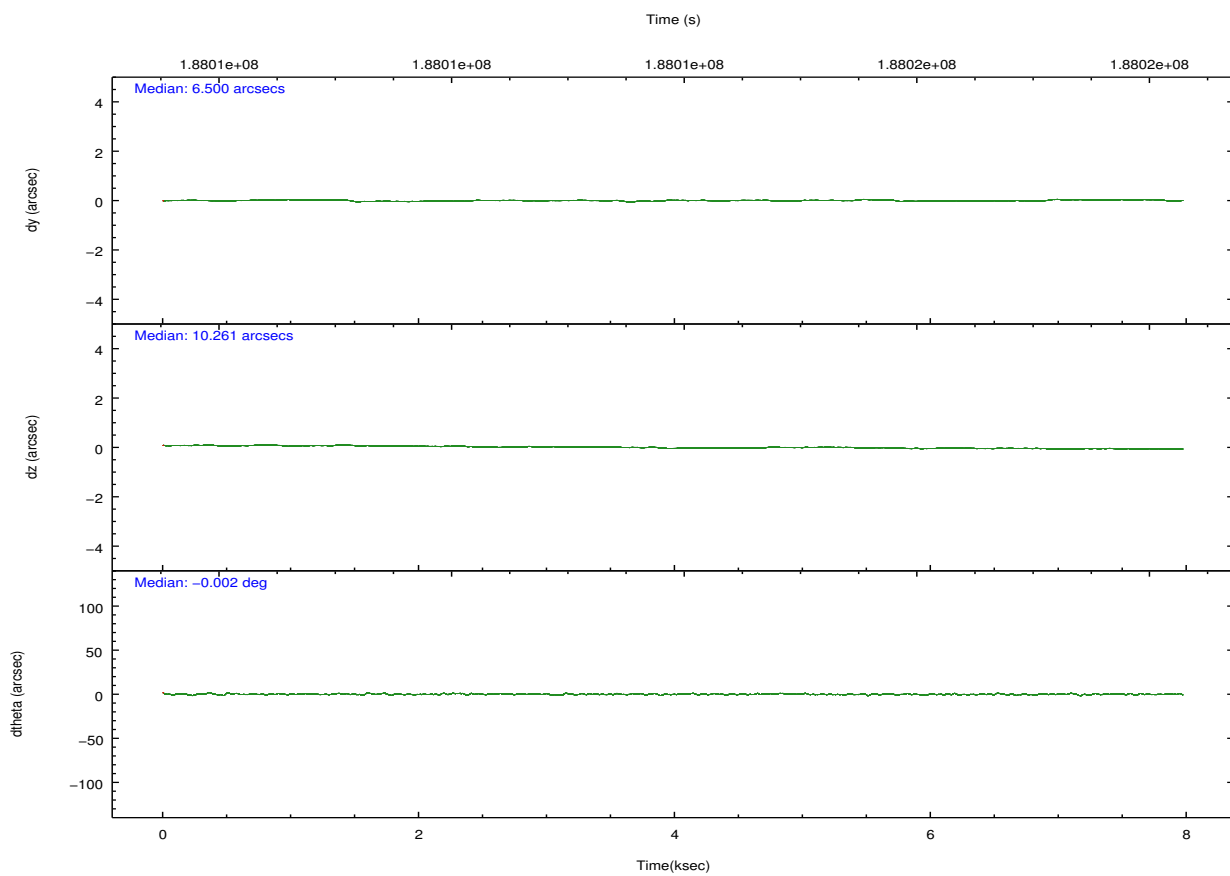
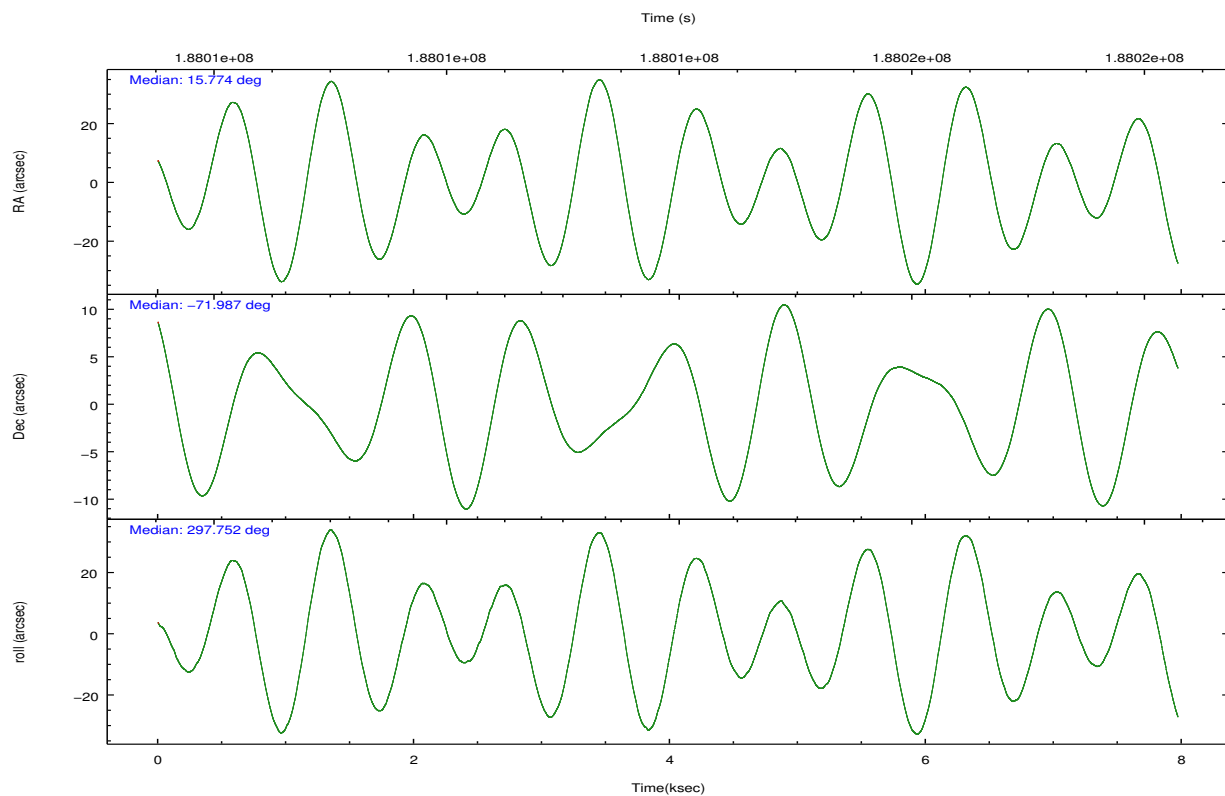
	ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7		ccd 0	ccd 1	ccd 2	ccd 3	ccd 6	ccd 7
level 1 events	32057	30680	60671	33590	36078	34012	grade 0 events	1690	1441	22996	1409	1428	1754
rejected events	28128	26948	32799	30098	32322	16741		5%	4%	37%	4%	3%	5%
rejected %	87%	87%	54%	89%	89%	49%	grade 1 events	17	14	192	25	16	20
								0%	0%	0%	0%	0%	0%
							grade 2 events	824	777	2519	695	744	3607
								2%	2%	4%	2%	2%	10%
							grade 3 events	445	411	816	379	411	1763
								1%	1%	1%	1%	1%	5%
							grade 4 events	365	409	823	383	413	1651
								1%	1%	1%	1%	1%	4%
							grade 5 events	1057	1142	1111	1218	1289	3604
								3%	3%	1%	3%	3%	10%
							grade 6 events	609	699	735	626	762	8504
								1%	2%	1%	1%	2%	25%
							grade 7 events	27050	25787	31479	28855	31015	13109
								84%	84%	51%	85%	85%	38%

## 2.2 Compared Parameters

Parameter	Planned	Actual	Parameter	Planned	Actual
Instrument	ACIS	ACIS	Obspar format version number	7	7
Detector	ACIS-012367	ACIS-012367	Obspar file type	PREDICTED	ACTUAL
Grating	NONE	NONE	Obspar update status	NONE	UPDATED
Data mode	VFAINT	VFAINT	Number of optional ACIS chips dropped	0	0
Observation mode	POINTING	POINTING	On-chip summing requested	N	N
[deg] Pointing RA	15.699019	15.77410097719276	Subarray requested	NONE	NONE
[deg] Pointing Dec	-71.972093	-71.98663076292856	Alternating exposures requested	N	N
[deg] Pointing Roll	297.479269	297.7593475273878	[s] Primary exposure time	0.000000	3.2
[s] Window start time (MET)	181353664.184000	181353664.184000			
[s] Window stop time (MET)	189216064.184000	189216064.184000			
[mm] SIM focus pos	-0.782348	-0.7809083437167272			
[mm] SIM defocus	0	0.001439871863259334			
[mm] SIM translation stage pos	-233.592463	-233.5874344608287			
[mm] SIM translation stage offset	0	-0.005018542100998502			
[s] Observation start time (MET)	188010103.184000	188009728.04175			
Observation start date	2003-12-17T01:00:39	2003-12-17T00:55:28			
[s] Observation end time (MET)	188017895.184000	188018209.91712			
Observation end date	2003-12-17T03:10:31	2003-12-17T03:16:49			
Read mode	TIMED	TIMED			

## 2.3 Aspect



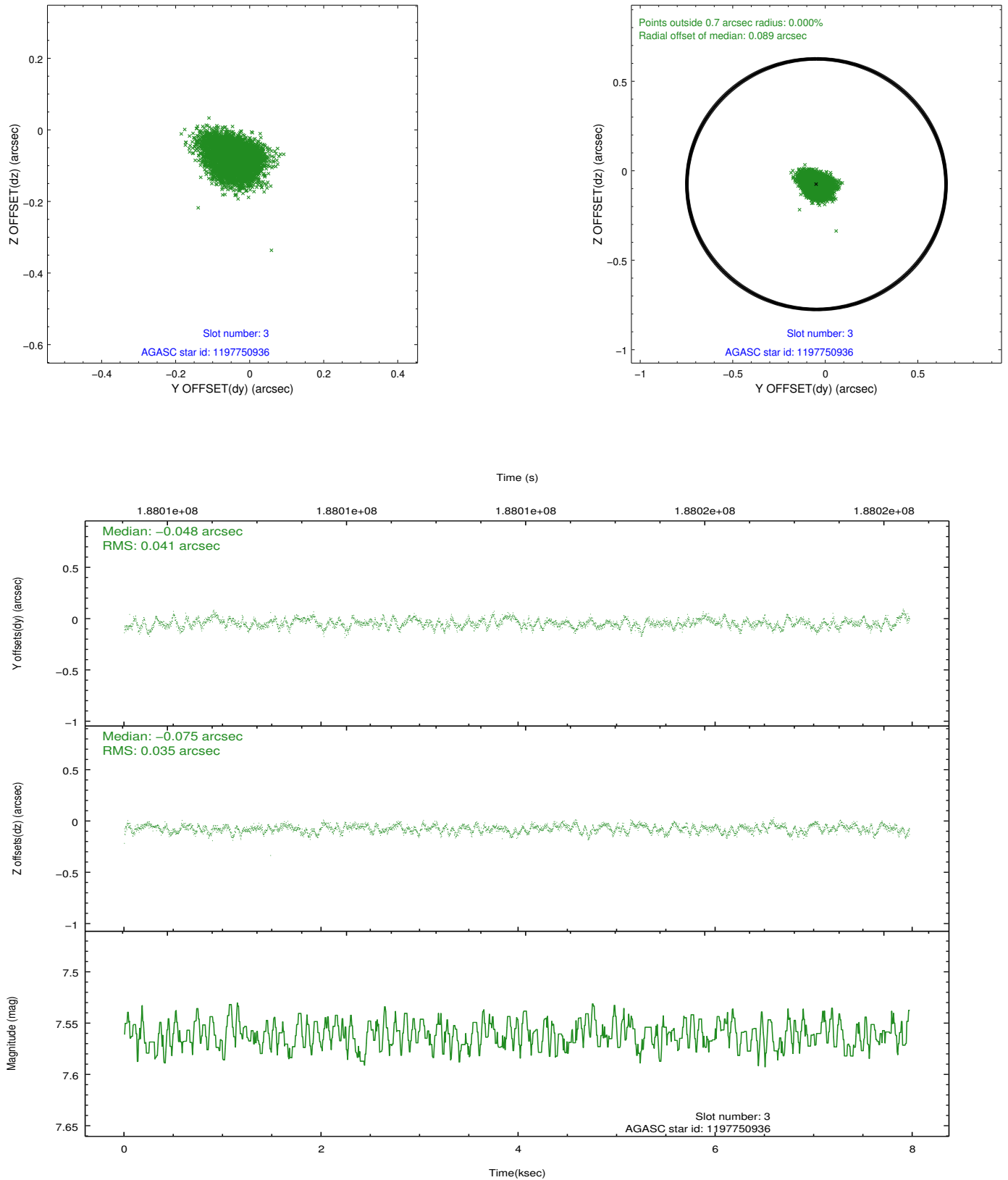


### Slot Statistics

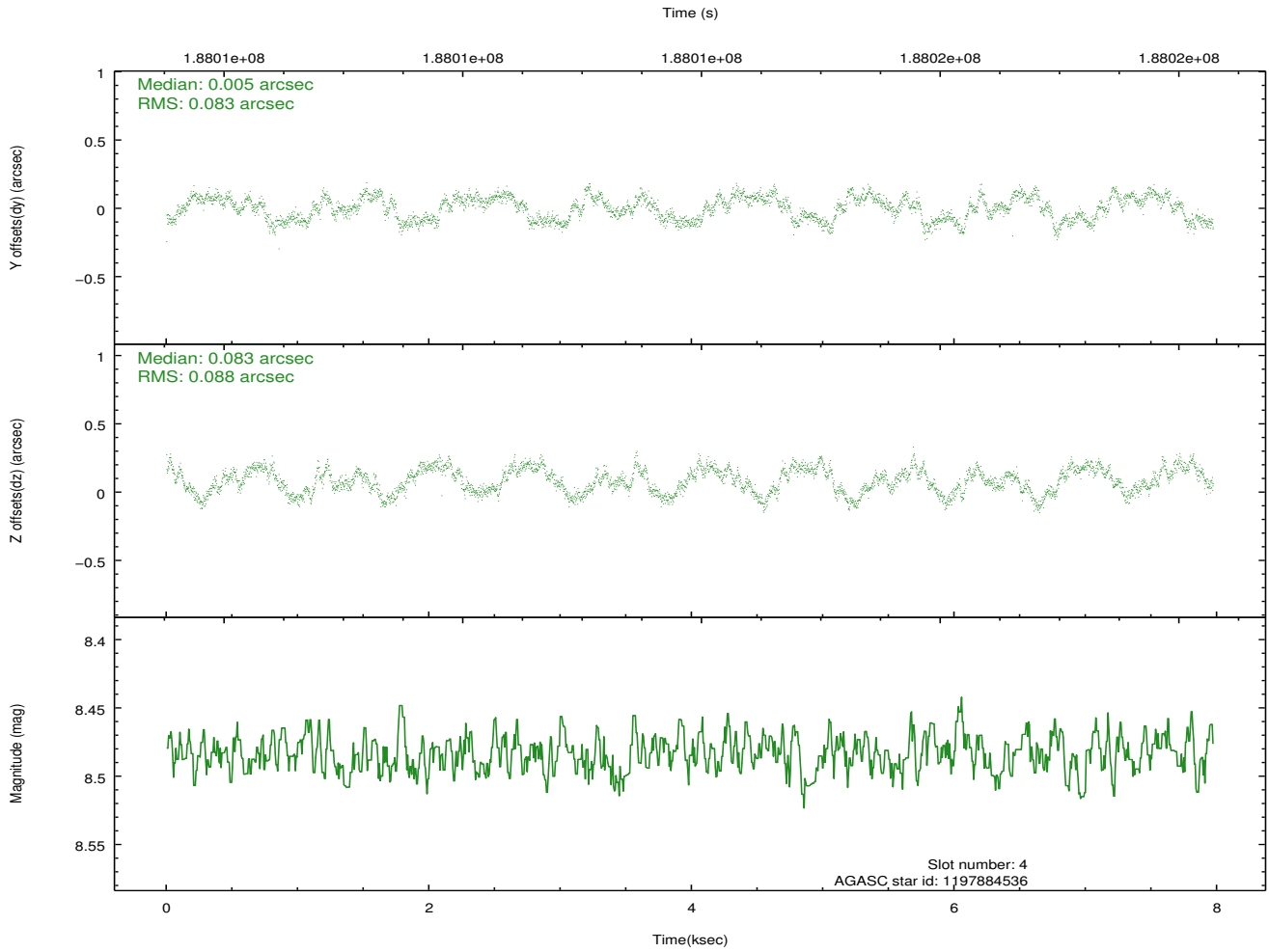
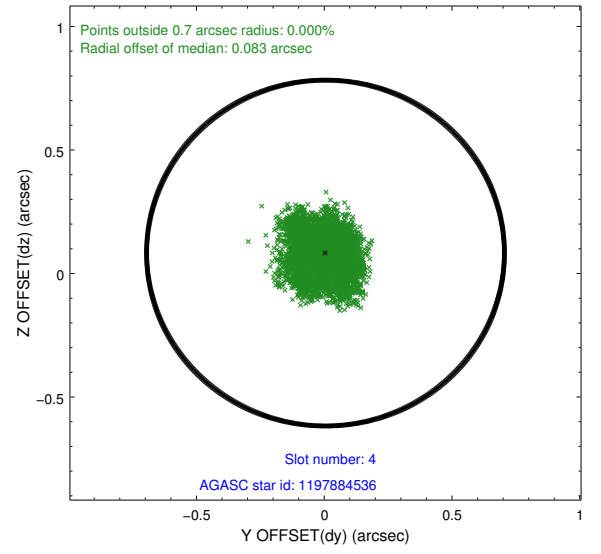
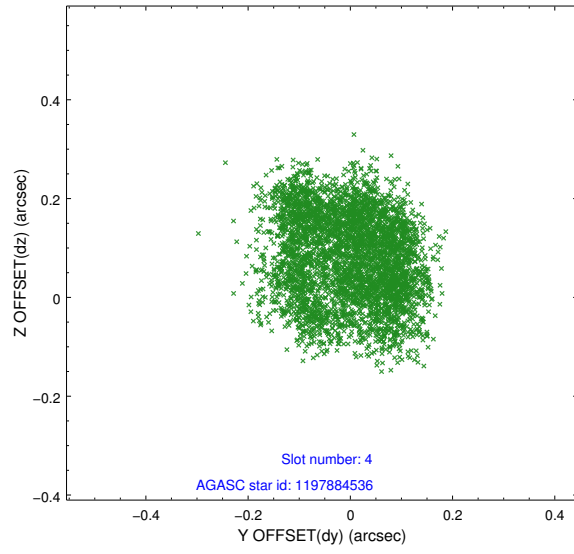
slot	status	id	mag	n_pts	med_dy	med_dz	dr1	dr2	ra	dec	mean_y	mean_z
0	FID	ACIS-I-1	7.24	1945	-0.018	-0.005	0.009	0.016	0.000000	0.000000	933.17	-833.75
1	FID	ACIS-I-4	7.18	1945	0.077	0.035	0.008	0.013	0.000000	0.000000	2153.71	1065.74
2	FID	ACIS-I-5	7.23	1945	-0.158	0.040	0.007	0.012	0.000000	0.000000	-1814.05	1064.41
3	GUIDE	1197750936	7.56	3889	-0.048	-0.075	0.058	0.091	15.387940	-71.549550	-1511.95	386.71
4	GUIDE	1197884536	8.48	3888	0.005	0.083	0.132	0.191	17.160729	-71.835289	337.25	1673.52
5	GUIDE	1197884712	8.30	3887	0.102	0.083	0.068	0.106	16.087398	-72.252690	1094.53	-88.01
6	GUIDE	1197885328	7.24	3889	0.028	-0.027	0.059	0.090	16.283090	-71.733943	-453.24	979.12
7	GUIDE	1198189696	7.39	3888	-0.080	-0.056	0.069	0.110	15.223750	-72.697522	2084.26	-1657.01

## 2.4 Star Slots

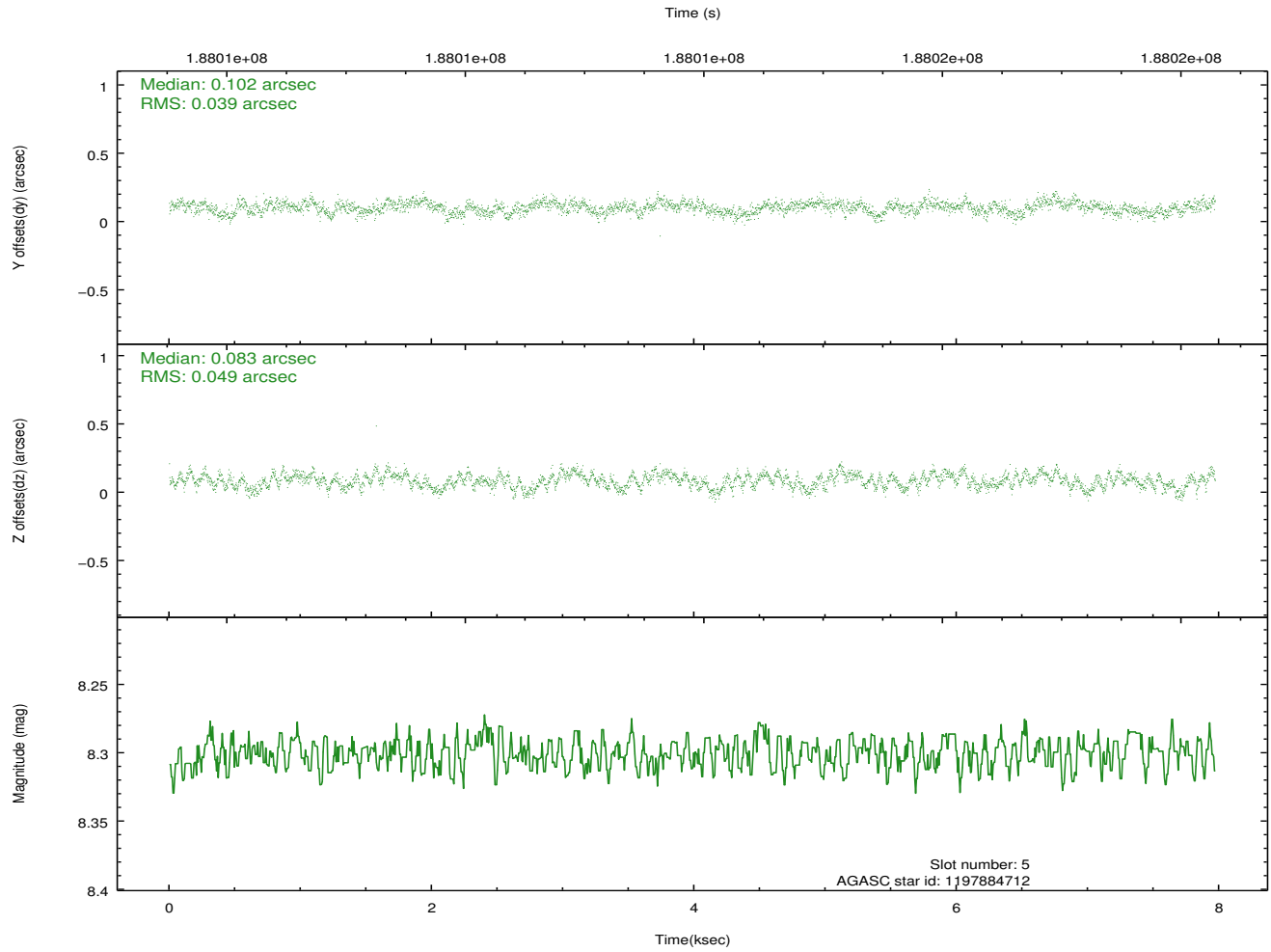
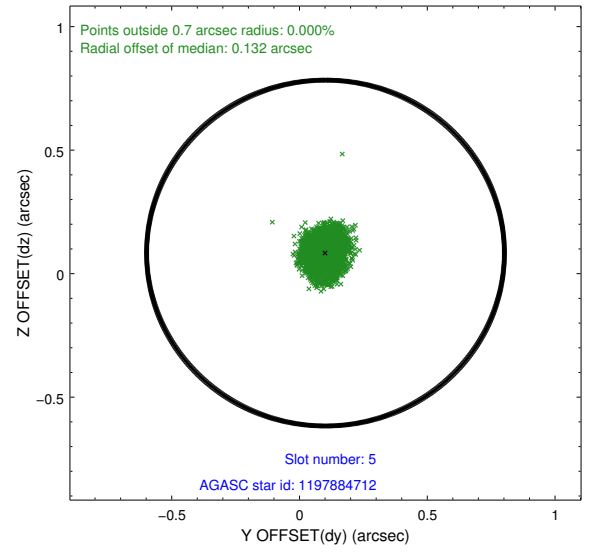
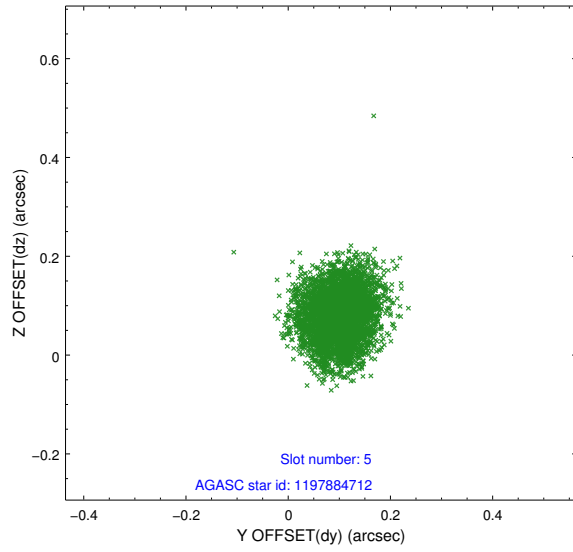
### 2.4.1 Slot 3



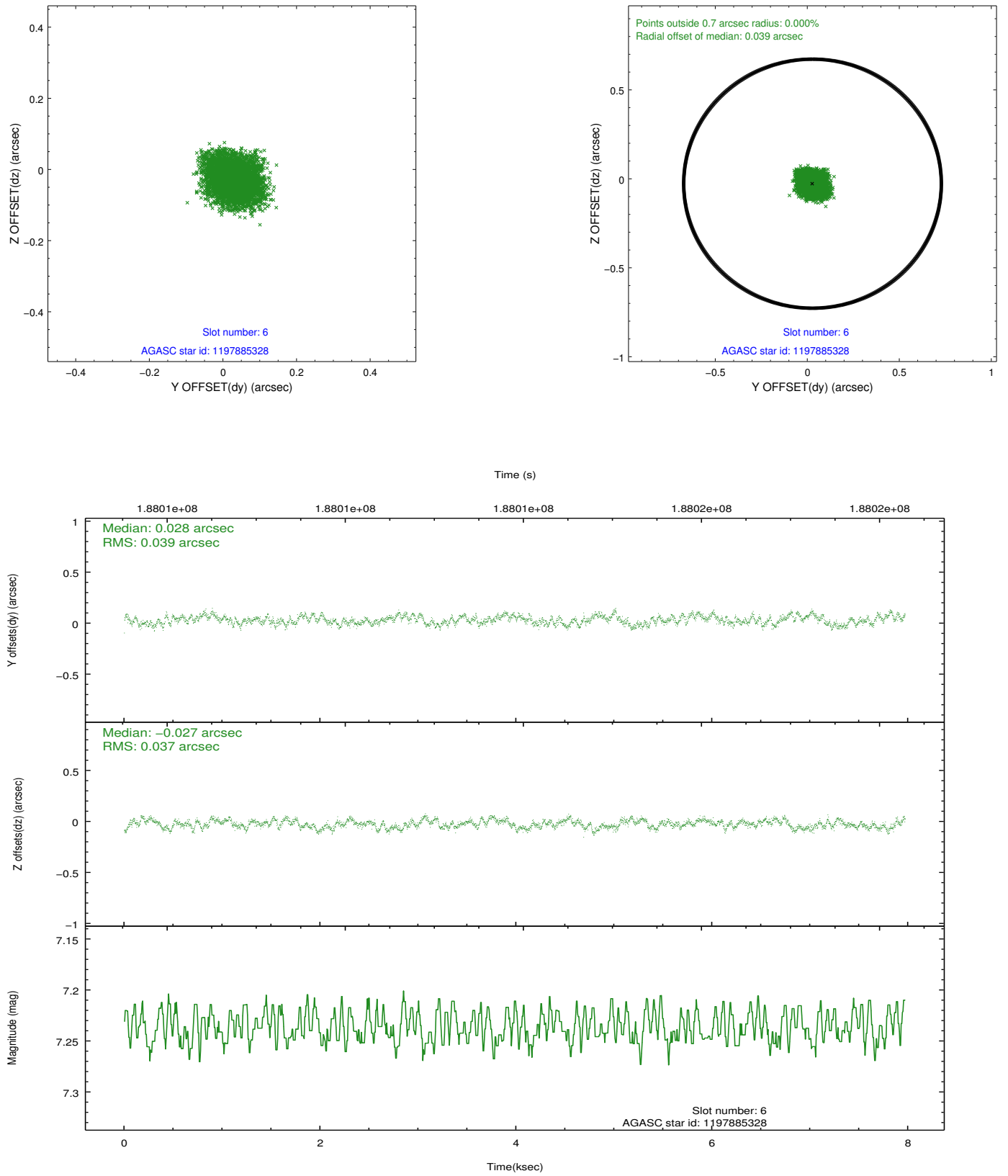
## 2.4.2 Slot 4



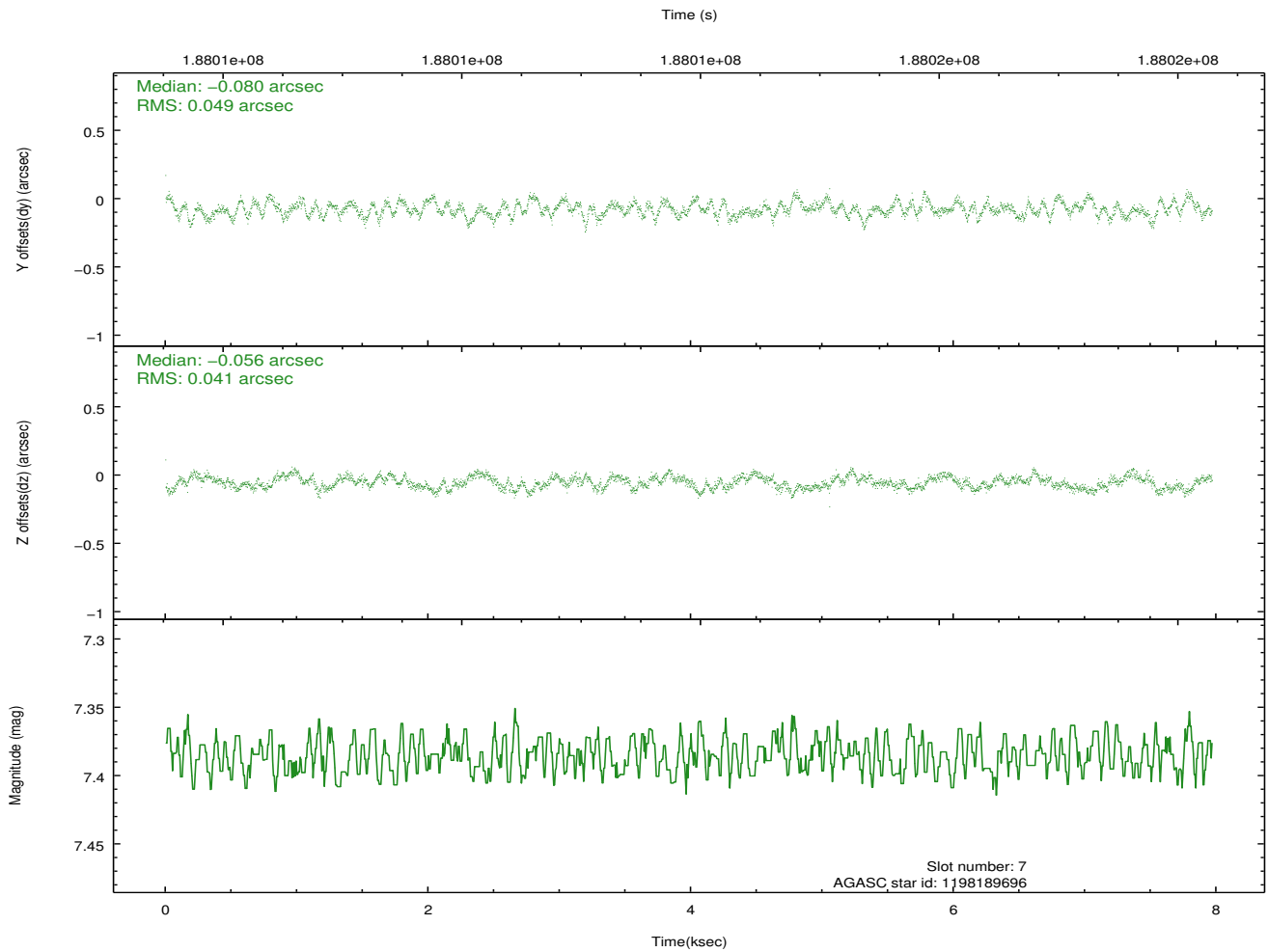
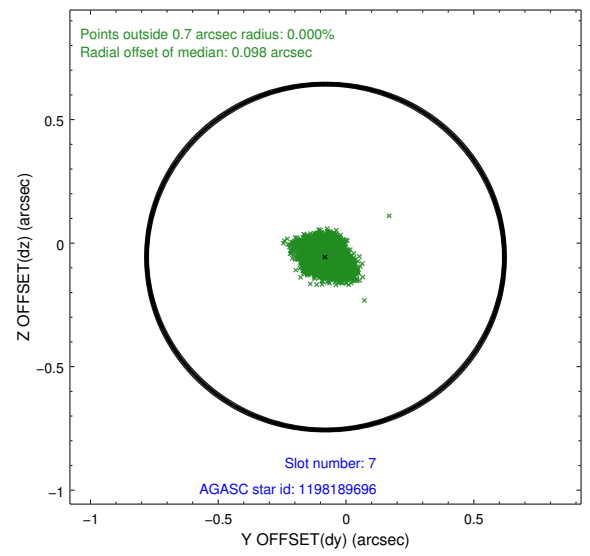
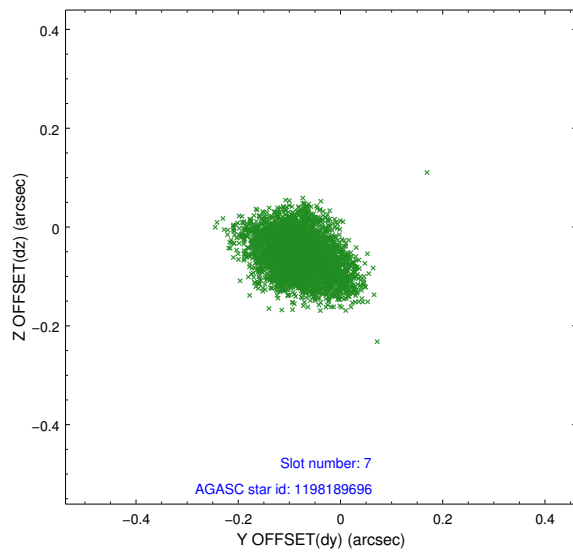
### 2.4.3 Slot 5



## 2.4.4 Slot 6

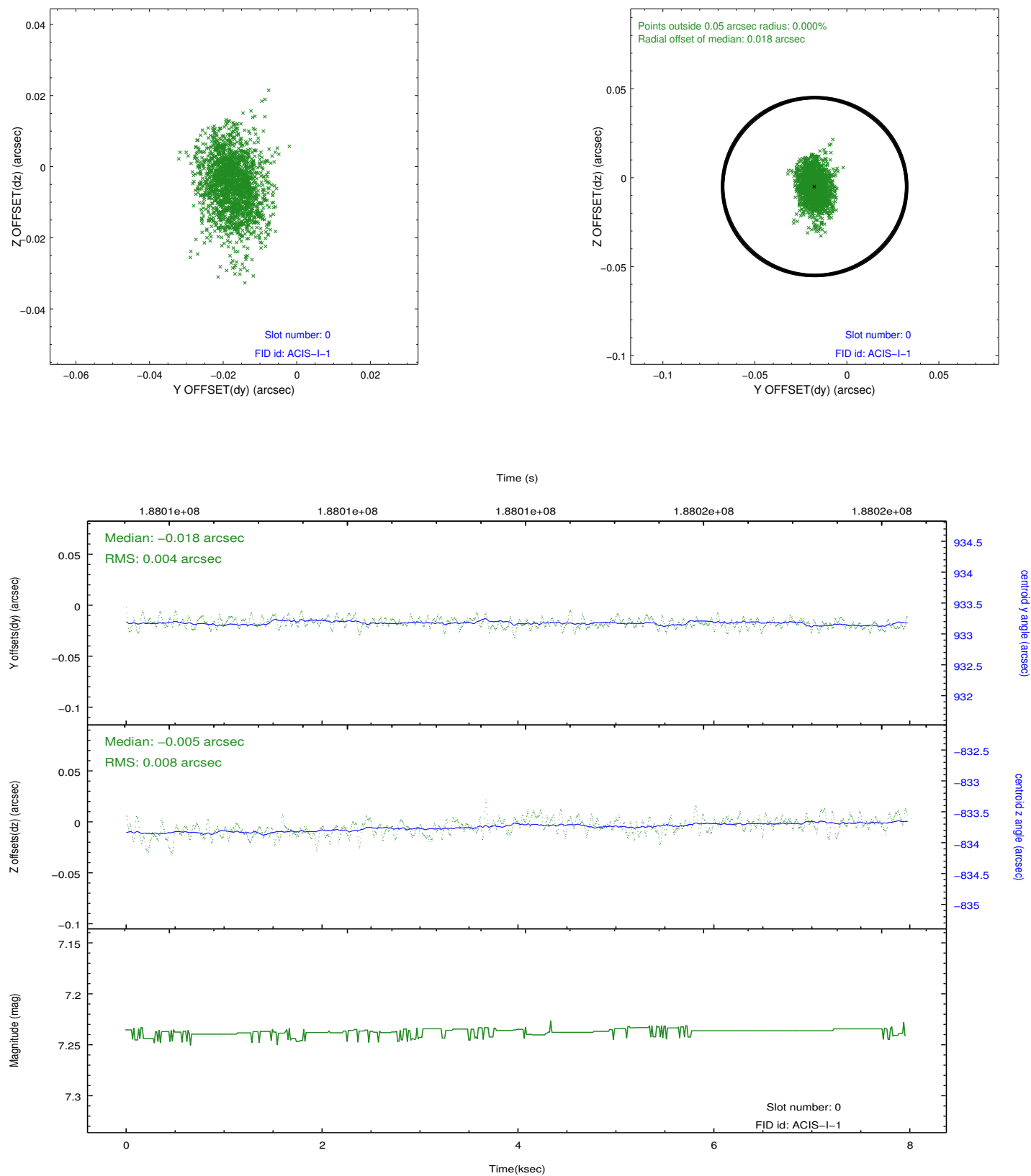


## 2.4.5 Slot 7

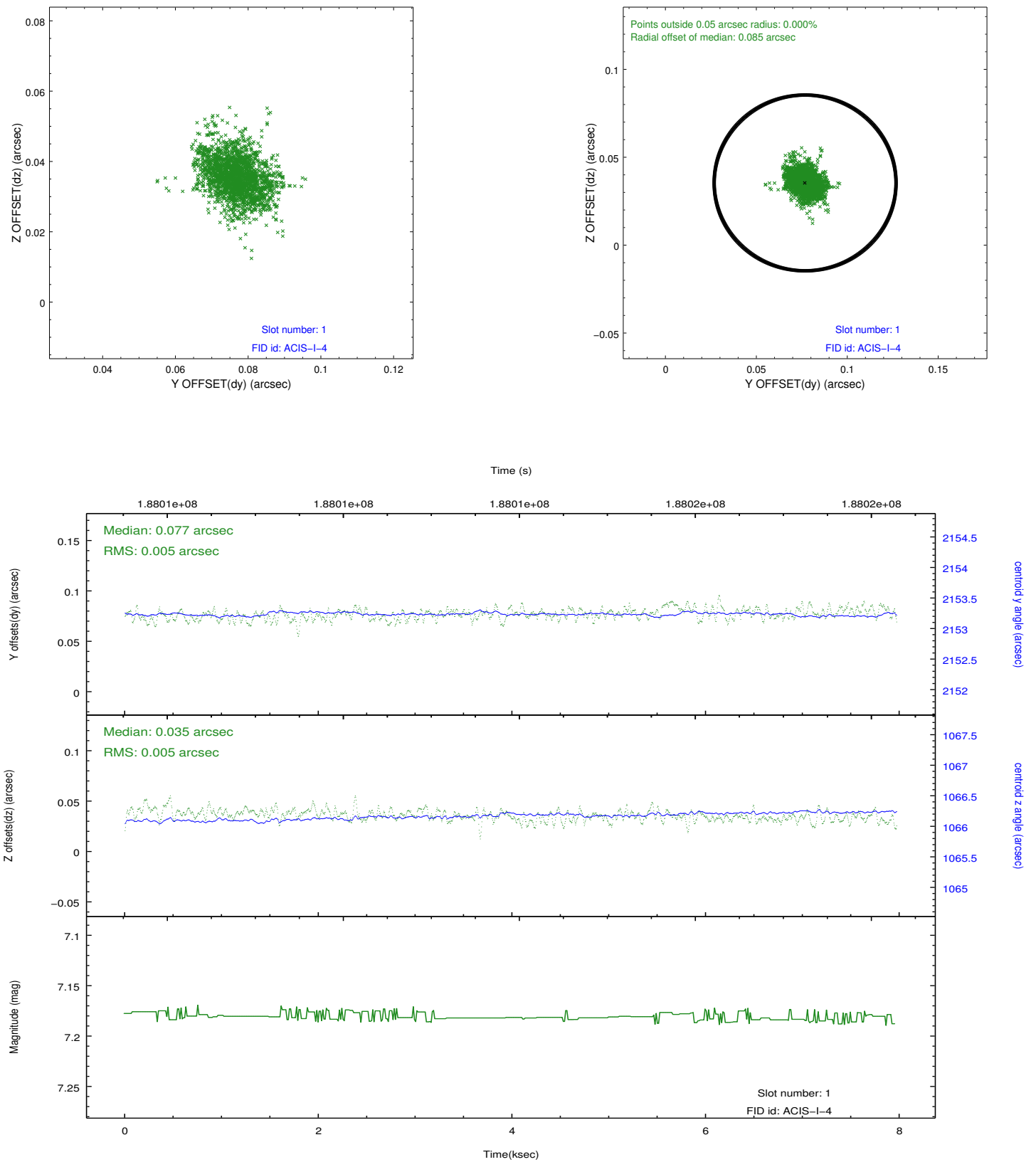


## 2.5 FID Slots

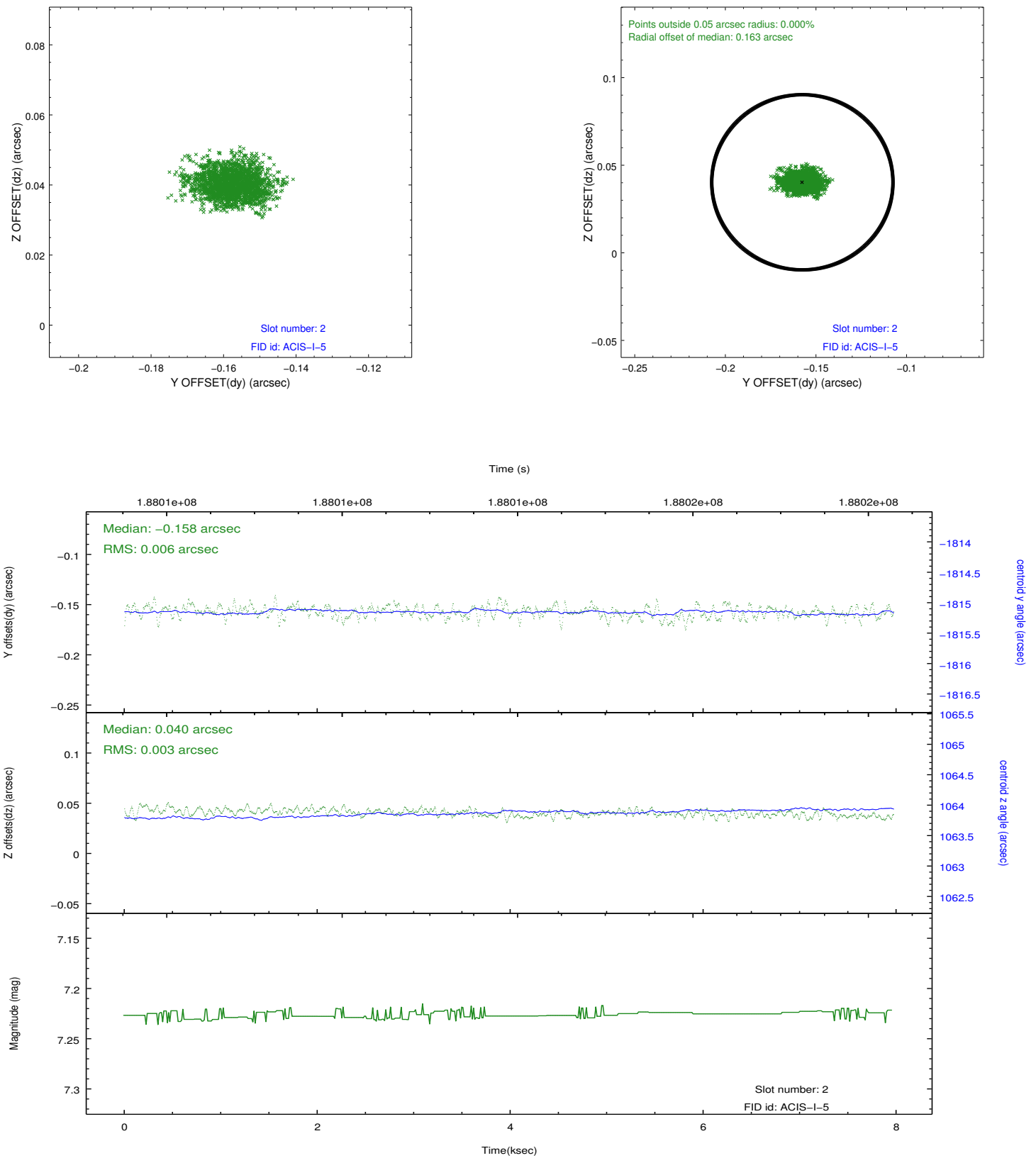
### 2.5.1 Slot 0



## 2.5.2 Slot 1



### 2.5.3 Slot 2



## A Summary

### A.1 Status

V&V Scientist	Jen Lauer
V&V Date (YYYY-MM-DD)	2012.12.03
V&V Edition	1
V&V Disposition and Status	OK
V&V Charge Time	7.548

### A.2 Comments

Window constraint satisfied.